

Microsoft®
Mediaroom™



The Microsoft Mediaroom Effect Quantifying the Business Value of a More Satisfying TV Experience

Learn more about Microsoft Mediaroom visit

<http://www.microsoftmediaroom.com>

This is a preliminary document and may be changed substantially prior to final commercial release of the software described herein. The information contained in this document represents the current view of Microsoft Corporation on the issues discussed as of the date of publication. Because Microsoft must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Microsoft, and Microsoft cannot guarantee the accuracy of any information presented after the date of publication.

This document is for informational purposes only. MICROSOFT MAKES NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AS TO THE INFORMATION IN THIS DOCUMENT.

Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Microsoft Corporation.

Microsoft may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from Microsoft, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

©2010 Microsoft Corporation. All rights reserved. Microsoft and Mediaroom are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. All other trademarks are property of their respective owners.

Contents

Executive Summary	1
Introduction	2
Pre-Interview Snapshot	3
The Major Findings	5
Microsoft Mediaroom Experience Considered Superior	5
Microsoft Mediaroom Ranks Higher Overall	7
Microsoft Mediaroom User Experience Possesses Quantifiable Business Value	8
Microsoft Mediaroom Positively Affects Inclination to Switch Services	11
Summary	13

Executive Summary

By building a TV service that emphasizes the ease of interaction and the quality of the subscriber's experience when interacting with the TV service itself, a service provider can position itself to increase average revenue per user (ARPU) over competing services, accelerate subscriber uptake, and reduce churn to a minimum. These are some of the key findings arising from a Microsoft-commissioned study that examined the business value of the user experience with Microsoft® Mediaroom™ and a variety of competing TV services.

In a six-month study, Microsoft-commissioned researchers interviewed more than 200 pay TV customers around the world and asked them to compare their experiences of two locally available pay TV services. One of these services was a locally available Microsoft Mediaroom-based service; the other was a competing local TV service. All the study participants subscribed to a pay TV service and all participants identified themselves as moderately to very satisfied with the TV service to which they subscribed.

That satisfaction notwithstanding, 80 percent of study participants identified the local Microsoft Mediaroom-based service as the one they would want after experiencing and comparing both services. What prompted participants to make this choice was not picture or sound quality—which were judged to be equal to the competing service among a majority of participants—but the ease with which they were able to interact with the service to find and manipulate the content they wanted to watch. Moreover, when asked how much they would be willing to pay for this more satisfying experience, study participants indicated that they would be willing to pay between 20 and 30 percent more than they are currently paying.

The study also found that the experience of Microsoft Mediaroom was compelling enough to make even satisfied subscribers think about switching to the Microsoft Mediaroom-based service. Among the 80 percent of study participants that named Microsoft Mediaroom as the superior service, only 18 percent of those came in to the study saying that they were considering switching services. Yet after experiencing both the Microsoft Mediaroom-based service and the local competing service, the percentage of participants who expressed an inclination to switch to Microsoft Mediaroom climbed to 34 percent. The percentage of people who had indicated that they were not thinking about switching fell from 41 percent to 22 percent. It is also worth noting that this interest in switching to the Microsoft Mediaroom-based service was strong even though the local Microsoft Mediaroom-based services with which participants interacted at the time of this study did not include features such as home media sharing and digital video recording (DVR) anywhere, which are now available and very popular among subscribers. Had participants experienced these easy-to-use services, interest in switching might have been even higher.

The bottom line? The quality of the user's experience when interacting with the TV service is important—and that that importance has a business value that can be quantified. Service providers building out a service with Microsoft Mediaroom can increase ARPU, increase service uptake, and reduce churn—all because they can provide subscribers with an easier, more intuitive, and more satisfying interaction with the TV service. In the short and long terms, focusing not just on content but also on the quality of the user's experience of the service is the key both to profitability and competitive advantage. And seeing is believing: Service providers must find as many ways as possible—including retail outlets, Web demos, and demo DVDs—to put the Microsoft Mediaroom-powered experience in front of consumers. The *experience* of the world's leading TV platform can motivate passive viewers to become active subscribers.

Introduction

As TV becomes a more interactive experience, *how* someone interacts with the TV becomes an ever more important consideration. TV used to be a relatively passive experience: A viewer stood up, walked to the TV, turned the dial to one of a handful of channels, and returned to the couch to watch a show. Today, the experience of watching TV is much more engaging: Viewers have complex remote controls, menus to navigate, and electronic program guides (EPGs) that can help them find content on hundreds of channels. The availability of video on demand (VOD) content helps personalize the TV viewing experience, so that a viewer can actively choose what content they want to enjoy whenever they want to enjoy it. DVR technology gives them this same measure of control over scheduled broadcast content.

While each of these technologies and services—from the remote controls to the VOD storefronts and DVR programming interfaces—may involve different software and/or hardware, the interplay of all these technologies and services has an effect on the user’s experience of a modern pay TV service. If the interplay of these services is easy and intuitive, if they make it easy for a subscriber to find or record content, then the experience can be a positive experience. Conversely, if the interplay of these services is complicated or unintuitive, if they do not make it easy for a subscriber to enjoy the content that interests them, then the experience is more likely to be disappointing or discouraging. There is a continuum that links these responses, of course, and different parts of a TV service may be more or less satisfying than other parts. It may be easy to find content using the EPG, for example, but difficult to find or manage recorded content on the DVR.

Microsoft wanted to understand whether, and to what extent, the user’s experience of a TV service translates into business value for a service provider. Note that this is not a question of satisfaction as it relates to TV *content*. The question here involves the satisfaction of the subscriber when *interacting* with the service delivering the content. In two services offering the same content, for example, with the same picture and sound quality, is the experience of finding and recording a particular sporting event on one service easier or more intuitive than finding and recording that same event on another service? If one service does provide a more satisfying interactive experience, is that experience of value to the subscriber? Is that experience valuable enough that a subscriber would pay for it—and, if yes, then how much more would a subscriber pay for it?

For service providers, the answers to these questions have clear significance: If the experience of interacting with the TV service is valuable to subscribers, then service providers that deploy a service that provides a more satisfactory experience are better positioned to increase service uptake, retain subscribers, and, ultimately, increase revenues.

To answer these questions, Microsoft engaged a number of research firms to conduct a study of pay TV subscribers and their feelings about the experience of using different TV services. To overcome any regional experiential biases, the researchers conducted this study in six countries where a Microsoft Mediaroom-based TV service is currently available (the United States, Canada, Germany, Switzerland, Italy, and Singapore). In the course of this study, more than 200 pay TV subscribers interacted with two TV services—one the locally available service based on Microsoft Mediaroom and the other a leading competing service. Before, between, and after the interactions with each service, study participants completed a series of questionnaires that captured information about preferences, priorities, and experience satisfaction levels. The firms conducting the interviews made every effort to eliminate any extraneous factors that would predispose a participant to prefer one service over another (they used identical TVs and lighting, for example, to show each service). Both TV

services were live, consumer-oriented services delivered by the actual service providers, not canned demonstrations of those services. As such, the study participants’ experience of these services was effectively the same experience they could expect to have in their own homes—though, it should be noted, none of the local Microsoft Mediaroom-based services with which participants interacted at the time of this study included currently shipping features such as home media sharing and DVR anywhere.

	Competing Local TV Service	Microsoft Mediaroom-based Service
United States	Comcast Digital	AT&T U-verse
Canada	Rogers	Bell Entertainment
Germany	Premiere	T-Home
Switzerland	Cablecom	Bluewin
Italy	Fastweb	WIND
Singapore	StarHub	SingTel MioTV

Table 1: The TV Services Presented

The research firms screened and selected the study participants in each of the countries. Participants were not told who was sponsoring the study, though no effort was made during the hands-on portion of the interview to disguise which TV services a participant was seeing. Care was taken to screen out industry professionals as well as people who were distinctly dissatisfied with their pay TV services, so the study group consisted exclusively of consumers who professed themselves between moderately and very satisfied with their current TV services. Microsoft had asked the firms to select participants who were not currently subscribing to either the local Microsoft Mediaroom-based service or the competing service, but this was not feasible in all geographies. Ultimately, 11 percent of the study participants were subscribers to the local Microsoft Mediaroom-based service, 38 percent were subscribers to the competing service, and 51 percent subscribed to a service other than the Microsoft Mediaroom-based service or the local competing service.

The findings of this study, in turn, are the subject of this white paper.

Pre-Interview Snapshot

Before letting them see or interact with the two different TV services, researchers asked the study participants to complete a survey identifying the top problems with their existing pay TV services. As noted, all participants professed to be moderately to very satisfied with their existing TV services, but this questionnaire provided further insight into their appreciation of their services. The questionnaire listed nineteen common complaints, ranging from “poor picture quality” to “parental controls too difficult to use.” Chart 1 below identifies the six most commonly cited issues. At the same time, the fact that the average rating for these most problematic issues ranged between 3 and 4 on a scale of 1 to 7 indicates that none of the participants perceived these issues to be particularly frustrating, annoying, or problematic.

Question: Some aspects of your current TV service may be frustrating, annoying, or problematic. How much do you agree that each of the following is a problem for you? (1=“Strongly Disagree”, 7 = “Strongly Agree”)

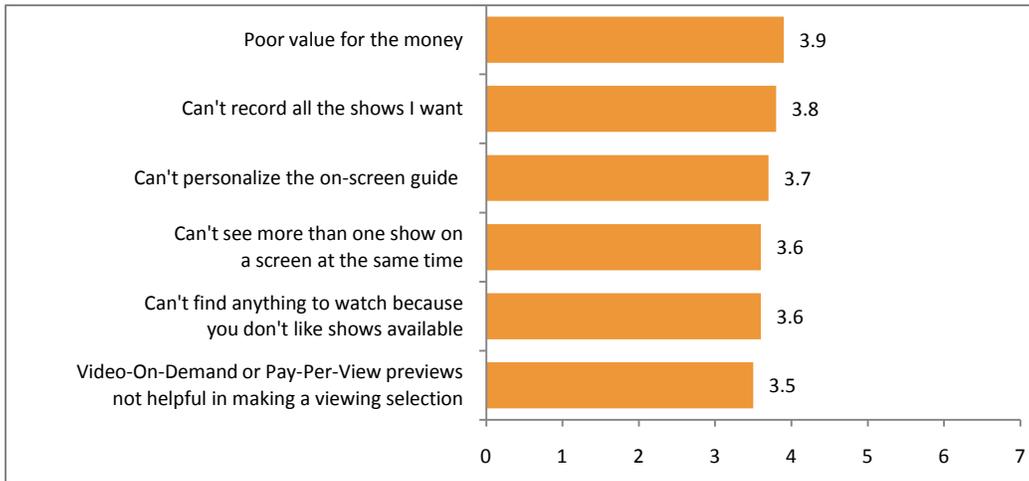


Chart 1: Existing Perceptions about TV Service Shortcomings

The questionnaire also asked study participants to identify which aspects of a TV service were of greatest importance to them when selecting a TV service. Not surprisingly, picture and sound quality carried the most weight. Clearly, delivering a TV service with poor picture and sound quality would deliver a poor user experience, so high quality picture and sound is assumed to be a prerequisite for any service provider building a new TV service. Once past picture quality and sound, however, participants clearly identified experiential areas of value: ease of use, ease of finding content, the ability to interact with the TV service without interrupting the enjoyment of the content that service is delivering.

Question: With “1” meaning “not at all important” and “7” meaning “very important” how important is each of the following items in your decision to purchase a TV service?

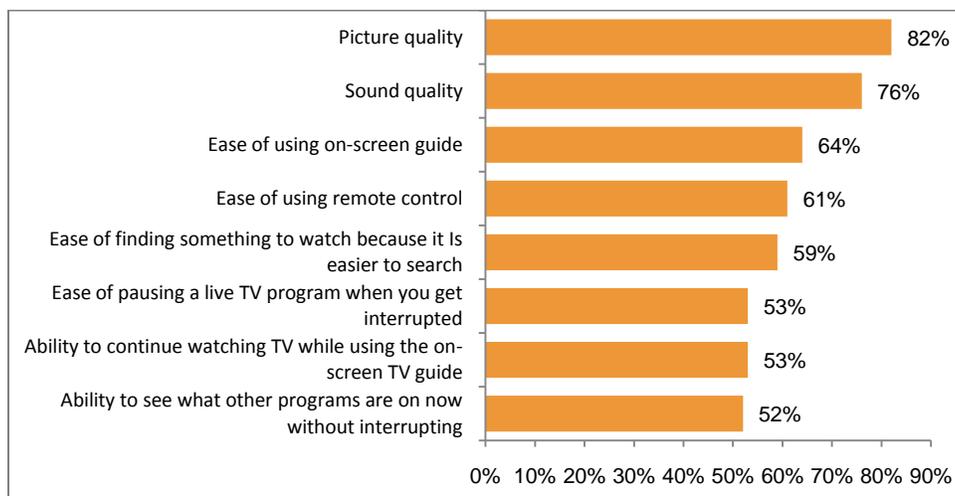


Chart 2: Of Greatest Importance When Selecting a TV Service

This chart reflects the percentage of responses in which users rated each aspect as a 6 or a 7. Thus, 64 percent of study participants around the world indicated that ease of using the on-screen guide was very important to

them. Similarly, 61 percent of the participants around the world indicated that the ease of using the remote control would play an important role in their decision to purchase a service.

These pre-interview findings provide a clear answer to the underlying question of whether the experience of interacting with the TV service is important to users. Furthermore, they provide a high level answer to the question of whether these experiences have a business value. Clearly, if ease of using the on-screen guide is one of the most important aspects of the TV experience to 64 percent of respondents, the service provider that can provide an on-screen guide will be able to provide a more attractive service to those users.

The Major Findings

What these pre-interview findings do not indicate, however, is which service provides the higher value experiences. To answer that question, researchers presented the first of the two TV services and then handed the remote control to the participants so that they could explore the system on their own. After a few minutes of exploring, the researchers gave the participants a list of 10 tasks to perform—however, they provided no instruction on *how* to perform them. One of the fundamental questions of interest was how intuitive or easy to use is the system itself? The 10 tasks ranged from tuning into a specific channel and pausing/unpausing live TV to using the EPG and the DVR to find and record shows. After completing the 10 tasks, researchers then gave an overview presentation of the service and its full range of capabilities, including a discussion of features that the participants had not been asked to use on that list of 10 tasks. Once that presentation was complete, participants completed a questionnaire about their experience using the service.

Upon completion of the questionnaire, researchers introduced the participants to the second of the two TV services and repeated the entire process, beginning with handing them the remote and letting them explore the service on their own for a few minutes.

Finally, once the participants had performed the same 10 tasks on the second system, seen the presentation of the full system, and completed a questionnaire about the second system, researchers asked them to complete a third questionnaire in which they compared their experiences of both services. For all questions comparing the two services—except for those specifically asking about pricing and value—subscribers were instructed to assume that both services cost the same and offered identical content. For questions involving interest in switching services, participants were told to assume there were no cash penalties or contractual matters that would preclude them from switching whenever they wanted.

Microsoft Mediaroom Experience Considered Superior

As previously noted, study participants who completed the pre-interview questionnaire about the importance of certain features when deciding which TV service to purchase, indicated that picture and sound quality were the most important features. Following picture and sound quality in stated importance were ease of using the EPG, ease of using the remote control, and ease of finding content to watch through an easier search interface. From these priorities, one would expect that picture and sound quality would by themselves drive a preference toward the Microsoft Mediaroom-based service or the competing service, but this was not the case. As we can see in Chart 3 on the next page, nearly 60 percent of study participants viewed picture quality as equal and 83 percent discerned no difference in sound quality. For these users, the experiences other than sound and picture quality are likely to be the experiences that drive selection choice.

Question: Assuming that both TV services offer the same channels and programs, which TV service provides the superior television experience for each of the following?

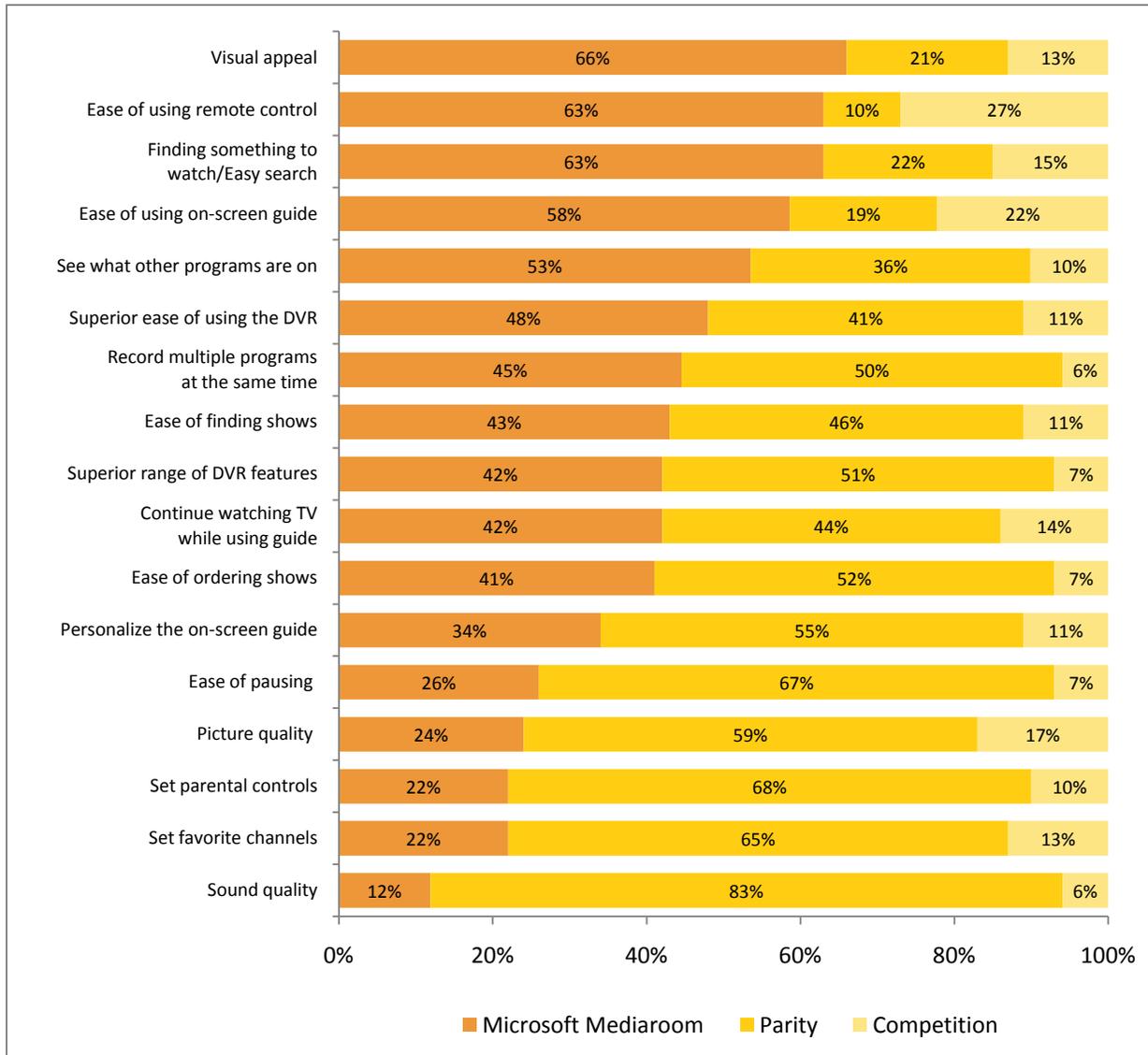


Chart 3: Which TV Service Provided Superior Experiences?

What are the most important services after picture and sound quality? According to the pre-interview questionnaire findings in Chart 2 (page 4), more than 50 percent of participants ranked the following aspects of a TV service as among the most important when choosing a TV service:

- Ease of using the on-screen guide.
- Ease of using the remote control.
- Ease of finding something to watch because it is easier to search.
- Ease of pausing live TV when interrupted.
- Ability to continue watching TV while using the on-screen guide.
- Ability to see what other programs are currently on without interrupting current programming.

And, after experiencing both the local Microsoft Mediaroom-based service and the local competing service, a significant majority of study participants indicated that Microsoft Mediaroom provides a distinctly superior experience in most of these areas.

- 58 percent preferred the Microsoft Mediaroom experience of using the on-screen guide.
- 63 percent preferred the Microsoft Mediaroom experience of using the remote control.
- 63 percent found it easier to use Microsoft Mediaroom to search for something to watch.
- 53 percent preferred the way Microsoft Mediaroom enabled them to see what other programs are currently on without interrupting current programming.

Even at the level of pure visual appeal—how the service looks when one interacts with it—the Microsoft Mediaroom-based service was found to be superior by 66 percent of the study participants. Only 13 percent thought the competing service was visually more appealing and only 21 percent thought they were even equal.

Microsoft Mediaroom Ranks Higher Overall

After experiencing both services and comparing experiences at the feature level, study participants were asked to indicate which TV service they would select. By an average margin of more than four to one, study participants around the world chose the Microsoft Mediaroom-based service.

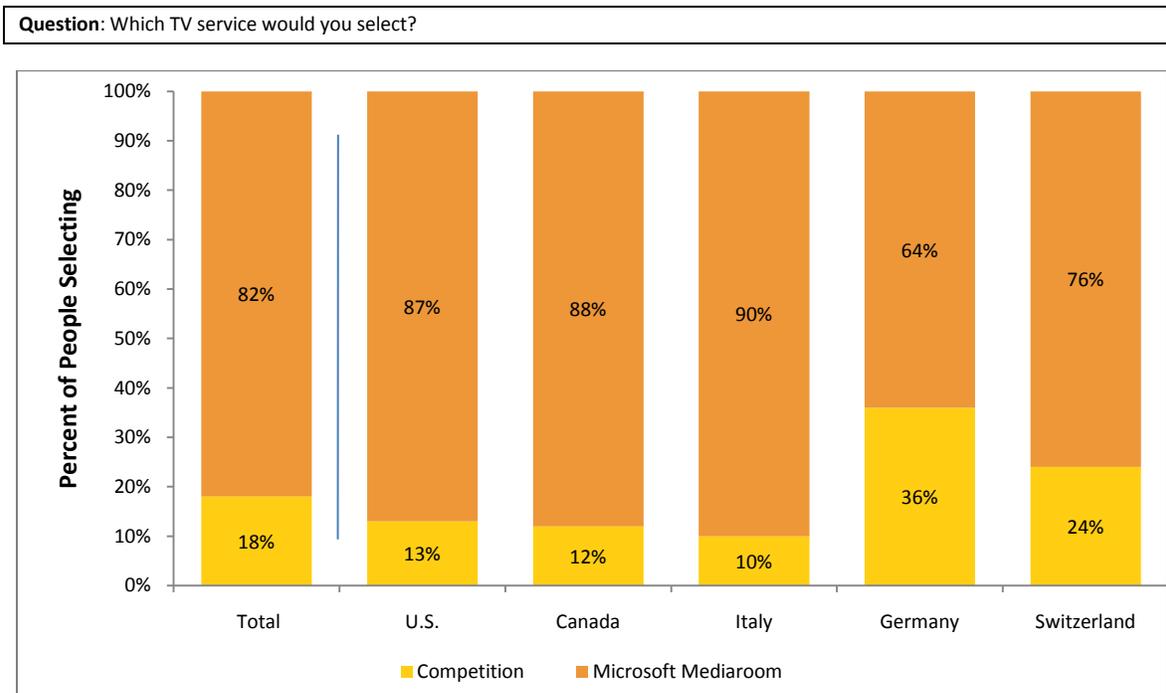


Chart 4: Which TV Service Would You Select?

Indeed, study participants comparing specific aspects of the two TV services preferred the Microsoft Mediaroom-based services by a factor of three or four to one:

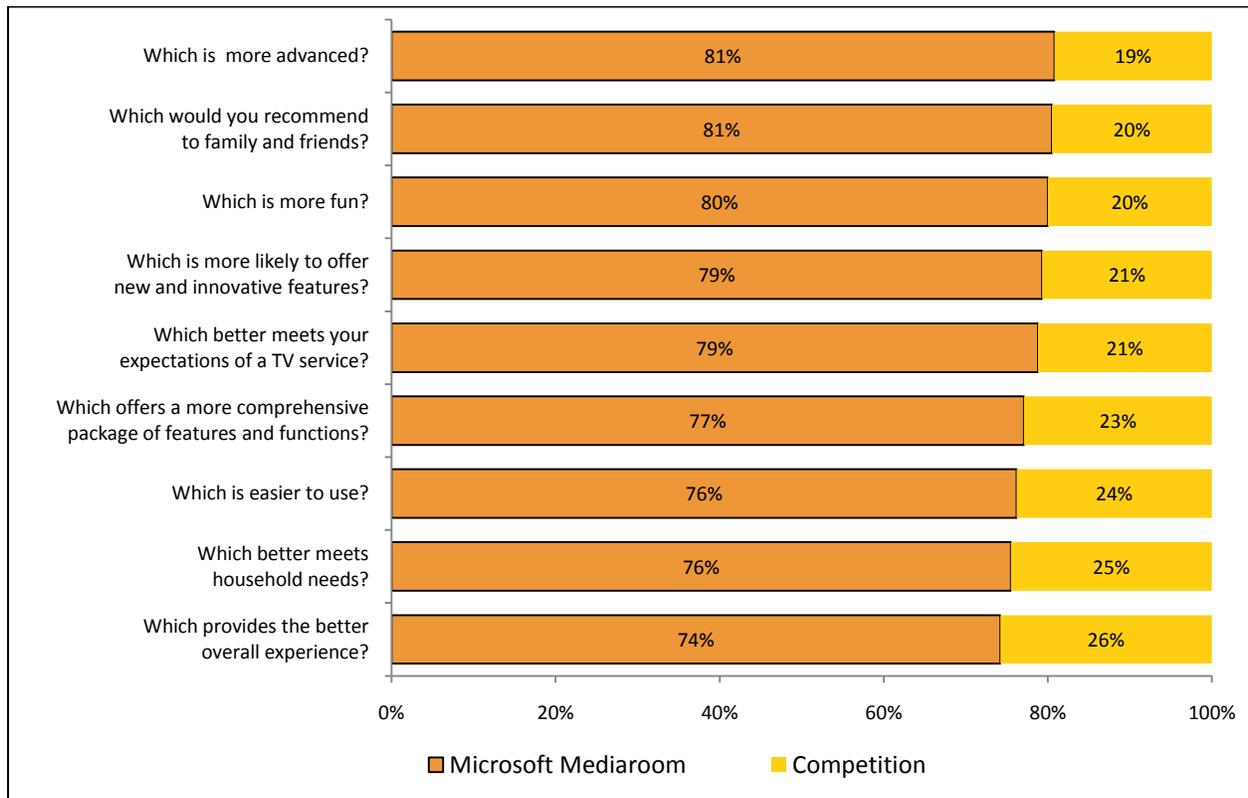


Chart 5: Microsoft Mediaroom Ranked Superior to the Competition

This data helps us understand why so many study respondents preferred the experience of Microsoft Mediaroom. Again, from a specification standpoint the two services were relatively comparable—they offered the same channels, and their picture and sound quality were even seen to be on par with one another. Yet the Microsoft Mediaroom-based service was viewed as superior and preferable to study participants around the world. The key difference here lies in the participants’ experience when interacting with the services themselves.

Microsoft Mediaroom User Experience Possesses Quantifiable Business Value

Clearly, the experience of a TV service has a business value. The experience of Microsoft Mediaroom prompted 82 percent of study participants to prefer it to the competing service. This cannot be attributed to predisposition, because only 11 percent of the participants were already subscribers to the Microsoft Mediaroom-based services and fully 38 percent were subscribers to the competing services. The remaining 51 percent subscribed to a different system entirely and had no reason to be more or less inclined towards either the Microsoft Mediaroom-based system or the competing system. Yet 82 percent of those participants were moved to prefer the Microsoft Mediaroom-based service to the competing service.

The more interesting business question that arises from this preference, though, is whether the value of the Microsoft Mediaroom experience translates into revenue. Are subscribers actually willing to pay more for this experience—and if so, how much more?

After experiencing both services, study participants were asked these very questions. Around the world, they clearly indicated that they would be willing to pay more for the Microsoft Mediaroom-based service, but how much more varied greatly by geography:

Question: For features and functions currently available on Mediaroom in addition to what you currently pay for TV services, how much extra would you be willing to pay per month?

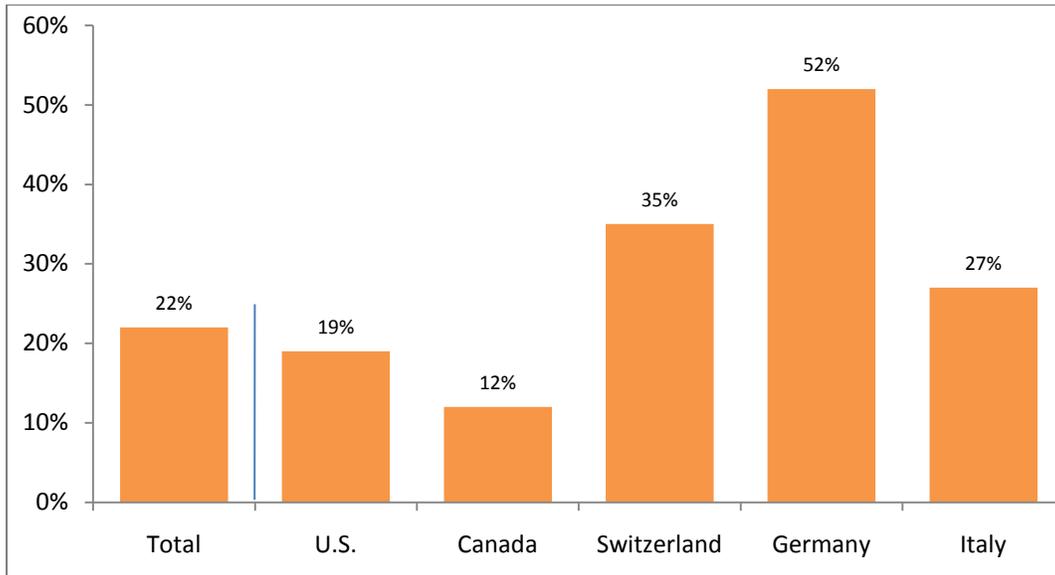


Chart 6: How Much More Would You Pay for Microsoft Mediaroom?

On average, participants indicated that they would be willing to pay 22 percent above what they are currently paying to have the services and the experience that Microsoft Mediaroom can provide. Canadian participants indicated the lowest average increase, at 12 percent over what they are currently paying, while German participants indicated the highest average increase at 52 percent over what they are currently paying. However, it should be noted that all of the participants in the Germany study were subscribed to Kabel Deutschland, a very low-ARPU cable service.

Normalizing the responses and indexing them against Microsoft Mediaroom, it appears that survey participants felt that the competing TV services were on average worth 27 percent less than Microsoft Mediaroom.

Question: How much do you think Mediaroom/Competitor is worth? (Normalized and Indexed to Mediaroom)

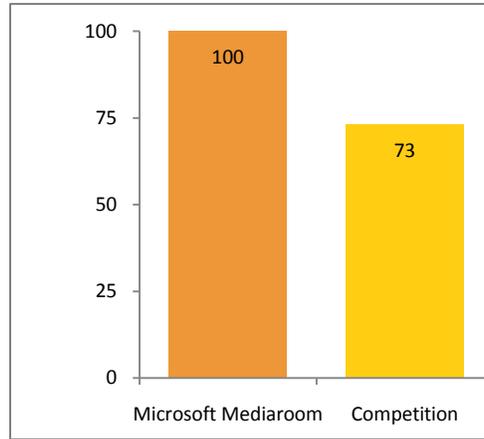


Chart 7: Normalized Value of Microsoft Mediaroom

When asked how much they thought the Microsoft Mediaroom and competing TV systems were worth in local currencies, the study participants generally valued Microsoft Mediaroom at 20 to 30 percent more than the competing service.

Question: How much do you think Microsoft Mediaroom/the competitive TV service is worth in the local currency?

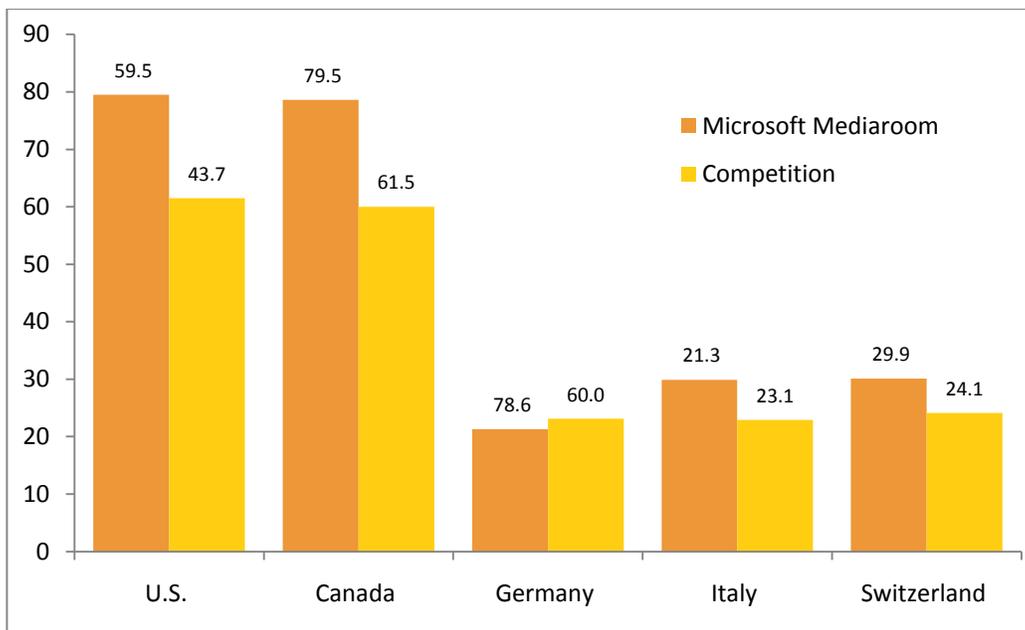


Chart 8: Perceived Value of Microsoft Mediaroom in Local Currency

The bottom line here is that the study provides a real indicator of the quantifiable value of the Microsoft Mediaroom experience. On average, study participants value the Microsoft Mediaroom experience at 20 to 30 percent higher than they value the experience provided by the competing TV service. While market conditions

in most countries make it difficult for a new TV provider to enter the market at a significant price premium, consumer reactions to Mediaroom-based services indicate that a high value package can be positioned at a comparable price.

Microsoft Mediaroom Positively Affects Inclination to Switch Services

One further finding that comes out of the study is that the effect of experiencing Microsoft Mediaroom alongside a competing service appears to have increased interest in switching services among study participants who had expressed little interest in switching before experiencing both services.

Among the 82 percent of participants who said they would select Microsoft Mediaroom over the competing service, only 18 percent of those participants had indicated they had been considering switching services within the next 12 months on the pre-interview questionnaire. After experiencing the Microsoft Mediaroom-based service alongside the competing local service, however, 34 percent of participants indicated that they would consider switching to the Microsoft Mediaroom-based service within the next 12 months. Likewise, 41 percent of those who selected the Microsoft Mediaroom-based service had indicated in the pre-interview survey that they had no plans to change services—yet after experiencing both services the number who were still saying they would not change services had dropped to 22 percent.

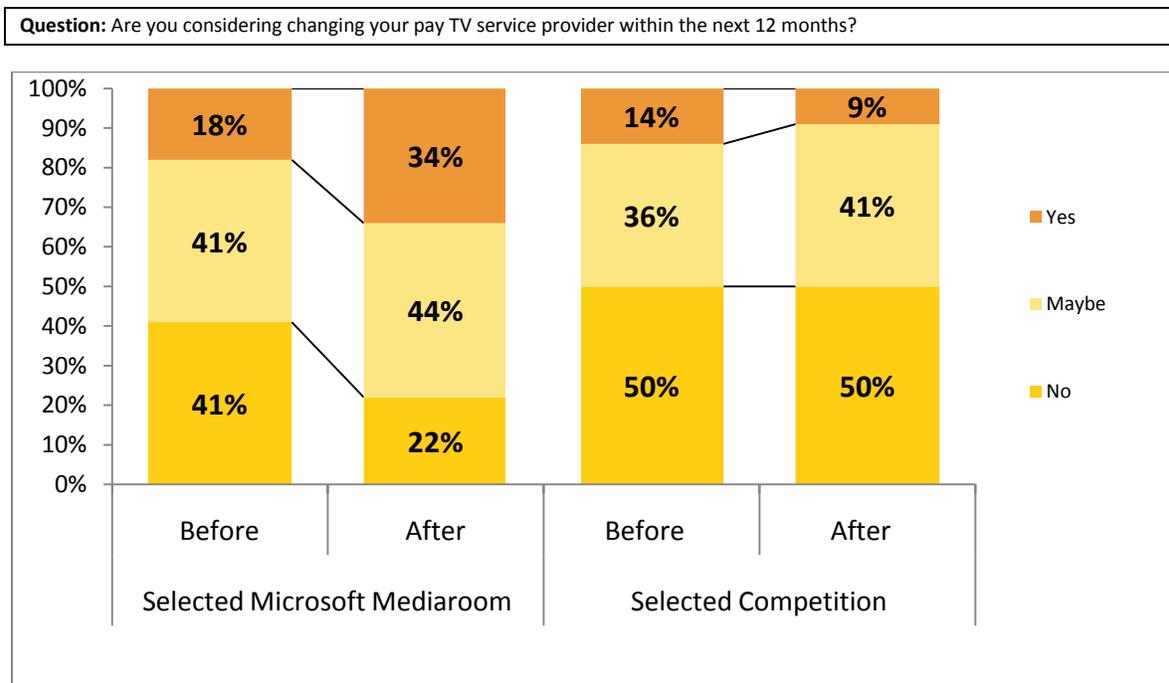


Chart 9: Experiencing Microsoft Mediaroom Positively Affects Inclination to Switch Services

By comparison, exposure to both services had little effect—indeed, a negative effect in one sense—on those who preferred the competing TV system. Among the 18 percent of participants who chose the competing system, only 14 percent of those participants had indicated an inclination to switch from their current pay TV service before experiencing both the local Microsoft Mediaroom-based service and the local competing service. After experiencing both, that percentage declined: only 9 percent of those selecting the competing service would switch to it after experiencing it. Among the 18 percent of participants who would have chosen the competing system (if they had to choose), 50 percent had indicated no inclination to switch from their current

pay TV service before experiencing both systems—and that number remained unchanged after experiencing both systems.

Regardless of whether they preferred Microsoft Mediaroom to the competition, the positive response to the question of considering switching service providers varied geographically. Consider the before and after changes across the different locations:

Question: Are you considering changing your pay TV service provider within the next 12 months?

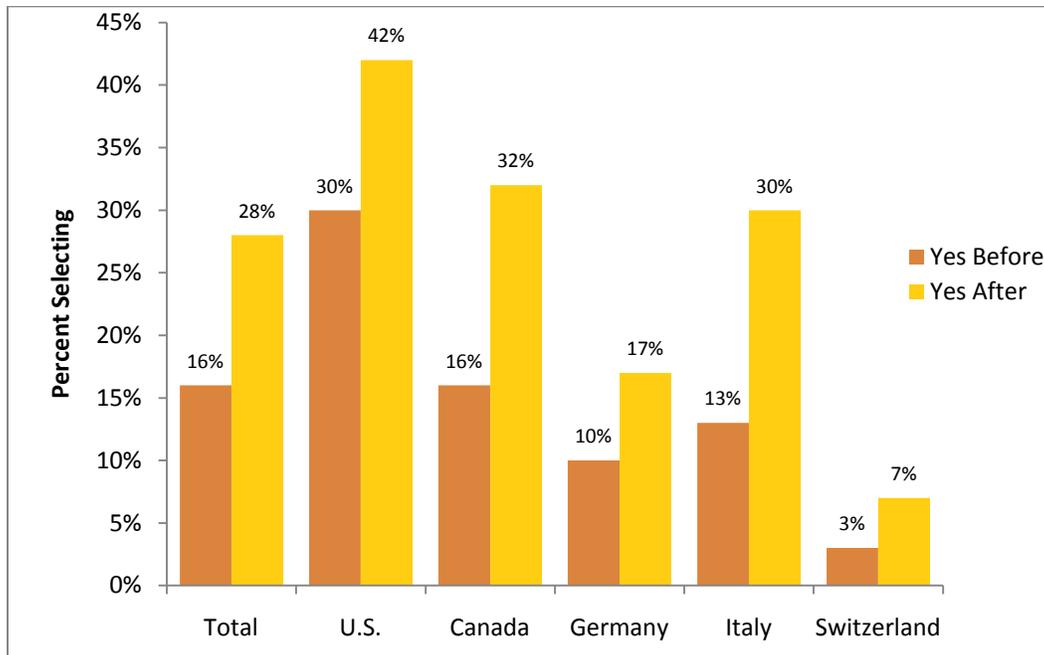


Chart 10: Increased Inclination to Change Services by Country

The willingness of participants to change services grew most significantly in the United States, Canada, and Italy, where inclination to switch topped 30 percent. It grew more moderately in Germany and Switzerland. It is important to reiterate here that study participants in every geography had identified themselves as moderately to very satisfied with their existing pay TV service. Yet upon experiencing both Microsoft Mediaroom and the local competing system their interest in switching to the Microsoft Mediaroom-based service increased significantly. One wonders what the effect of Microsoft Mediaroom would be on people who are *not* satisfied with their current TV service.

Finally, one also wonders how the numbers would be affected if participants had been able to experience currently-shipping Microsoft Mediaroom features such as home media sharing and DVR anywhere. These easy-to-use services appear to be very popular with subscribers, suggesting that they might have persuaded even more participants to consider switching.

Summary

Microsoft wanted to understand whether, and to what extent, the user's experience of a TV service translates into business value for a service provider. The data collected from this study provides ample evidence to indicate that the user's experience is important and that it has a quantifiable business value. When study participants had the opportunity to compare a locally available Microsoft Mediaroom-based service with a competing, commercially successful pay TV service, they choose Microsoft Mediaroom by a margin of more than four to one. Microsoft Mediaroom was more satisfying visually; it was easier to use the remote control; it was easier to find and watch content; it was easy to see what other programs were on, and more. The combination of technologies delivering services behind the scenes is sophisticated enough to work consistently, transparently, and in a manner that is more intuitive for users. And study participants clearly valued that more intuitive experience and strongly indicated the value that it brings to the overall TV service..

Again, it is worth noting that participants' selection of the local Microsoft Mediaroom-based service as the superior, higher-value service occurred even though none of the local Microsoft Mediaroom-based services with which participants interacted included currently available features, such as home media sharing and DVR anywhere. Had participants also experienced these easy-to-use services, even higher numbers of participants might have identified the Microsoft Mediaroom-based service as the higher-value service.

For service providers considering how best to build a competitive TV service, this study makes a compelling case for Microsoft Mediaroom. It shows that the quality of the user's experience when interacting with the TV service is important—and that that importance can be quantified. Moreover, the study indicates that subscribers are more likely to switch to a service that offers a superior experience.

Finally, as long as a service provider using Microsoft Mediaroom can deliver content, picture, and sound quality that is on par with the local competition, the service provider using Microsoft Mediaroom will have a competitive advantage. It is simply not possible for the competition to replicate the experience provided by Microsoft Mediaroom without redesigning and redeveloping the underlying TV service delivery platform—an undertaking that would involve a huge commitment of time and resources for the competing service provider.

Seeing is believing. Service providers need to look for as many ways as possible (retail, web-based demos, demo DVDs) to get the Mediaroom-powered experience in the hands of consumers so that they can enjoy to power of the world's leading TV platform.